

This listing of claims will replace all prior versions, and listings, of claims in the application:

IN THE CLAIMS

Claim 1 (Currently Amended): A method of providing multilevel information about video-on-demand services, comprising the steps:

providing a video-on-demand service system, wherein customers are able to choose interactively various programs stored in a video source and can view a selected program at any time;

generating a display, on a computer display screen, of a tree having a plurality of nodes and branches interconnecting the nodes; and

embedding in the nodes information about the video-on-demand services; and

wherein the displayed branches represent relationships between the nodes and the information embedded in the nodes.

Claim 2 (Original): A method according to Claim 1, wherein the embedding step includes the steps of:

identifying in a first catalog each of a group of first aspects of video-on-demand services;

identifying in a second catalog each of a group of second aspects of video-on-demand services;

forming a matrix from the first and second groups; and

embedding the matrix in one of the nodes.

Claim 3 (Original): A method according to Claim 2, wherein the step of identifying in the first catalog includes the step of identifying in the first catalog each of a group of users of the video-on-demand service.

Claim 4 (Original): A method according to Claim 1, wherein the embedding step includes the step of embedding information in the nodes in the form of matrices.

Claim 5 (Original): A method according to Claim 4, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:

usage patterns between the supplier of the video services and the consumer, a list of users, user statistics, satisfaction rates, failure rates, failure causes, rates of view to completion, cost monitor information, customer payment information, menus of videos, charge variations, special features and offers, user age, user education, geography, and any combination of the above.

Claim 6 (Currently Amended): A system for providing multilevel information about video-on-demand services, wherein said video-on-demand services enable customers to choose interactively various programs stored in a video source and enable customers to view a selected program at any time, the system comprising:

a computer display screen;

means for generating a display, on the computer display screen, of a tree having a plurality of nodes and branches interconnecting the nodes; and

means for embedding in the nodes information about the video-on-demand services; and

wherein the displayed branches represent relationships between the nodes and the information embedded in the nodes.

Claim 7 (Original): A system according to Claim 6, wherein the embedding means includes:

means for identifying in a first catalog each of a group of first aspects of video-on-demand services;

means for identifying in a second catalog each of a group of second aspects of video-on-demand services;

means for forming a matrix from the first and second groups; and

means for embedding the matrix in one of the nodes.

Claim 8 (Original): A system according to Claim 7, wherein the means for identifying in the first catalog includes means for identifying in the first catalog each of a group of users of the video-on-demand service.

Claim 9 (Original): A system according to Claim 6, wherein the embedding means includes means for embedding information in the nodes in the form of matrices.

Claim 10 (Original): A system according to Claim 9, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:

usage patterns between the supplier of the video services and the consumer, a list of users, user statistics, satisfaction rates, failure rates, failure causes, rates of view to completion, cost monitor information, customer payment information, menus of videos, charge variations, special features and offers, user age, user education, geography, and any combination of the above.

Claim 11 (Currently Amended): A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for providing multilevel information about video-on-demand services, wherein said video-on-demand services enable customers to choose interactively various programs stored in a video source and enable customers to view a selected program at any time, said method steps comprising:

generating a display, on a computer display screen, of a tree having a plurality of nodes and branches interconnecting the nodes; and

embedding in the nodes information about the video-on-demand services; and

wherein the displayed branches represent relationships between the nodes and the information embedded in the nodes.

Claim 12 (Original): A program storage device according to Claim 11, wherein the embedding step includes the steps of:

identifying in a first catalog each of a group of first aspects of video-on-demand services;

identifying in a second catalog each of a group of second aspects of video-on-demand services;

forming a matrix from the first and second groups; and

embedding the matrix in one of the nodes.

Claim 13 (Original): A program storage device according to Claim 12, wherein the step of identifying in the first catalog includes the step of identifying in the first catalog each of a group of users of the video-on-demand service.

Claim 14 (Original): A program storage device according to Claim 11, wherein the embedding step includes the step of embedding information in the nodes in the form of matrices.

Claim 15 (Original): A program storage device according to Claim 14, wherein the matrices are used to display information about an aspect of video-on-demand service selected from the group comprising:

usage patterns between the supplier of the video services and the consumer, a list of users, user statistics, satisfaction rates, failure rates, failure causes, rates of view to completion, cost monitor information, customer payment information, menus of videos, charge variations, special features and offers, user age, user education, geography, and any combination of the above.

Claim 16 (Original): A method as recited in claim 1, wherein the tree is displayed top down.

Claim 17 (Original): An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing provision of multilevel information about relationships between users and items of video-on-demand services, the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 1.

Claim 18 (Currently Amended): A method for representing interconnections of a plurality of elements of a video-on-demand system, wherein said video-on-demand system enable customers to choose interactively various programs stored in a video source and enable customers to view a selected program at any time, the method comprising:

providing a first catalog for a first subset of said elements, and providing a second catalog for a second subset of said elements;

creating a matrix of connection cells, each cell formed by an intersection of a pair of elements, wherein a first element of each pair is taken from the first catalog and a second element of each pair is taken from the second catalog; and

forming a connection representation for at least a subset of the pairs, the connection representation for each cell represents a relationship between the elements forming the cell.

Claim 19 (Original): A method as recited in claim 18, wherein at least one element is a catalog of sub-elements, and the method further comprises the step of including all sub-elements in the matrix.

Claim 20 (Original): A method as recited in claim 18, wherein at least one of the catalogs includes a plurality of sub-catalogs.

Claim 21 (Original): A method as recited in claim 18, wherein at least a portion of one catalog is formed using combinatorial operations upon elements of other catalogs.

Claim 22 (Original): A method as recited in claim 18, further comprising displaying at least one portion of the matrix.

Claim 23 (Original): A method as recited in claim 18, further comprising employing a wizard to form at least a subset of the elements.

Claim 24 (Original): An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing representation of interconnection of a plurality of elements of a video-on-demand system,

the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 18.

Claim 25 (Currently Amended): An architecture for providing information about a video-on-demand service system, said service system including a set of video-on-demand elements, and enabling customers to choose interactively various programs stored in a video source and to view a selected program at any time, the architecture comprising:

a matrix module forming a video-on-demand information system matrix having at least one matrix row element and at least one matrix column element, an intersection of each said at least one matrix row element with each said at least one matrix column element forming a matrix cell;

a set of video-on-demand elements, a first subset of said set having a connection requirement with a second subset of said set;

a first catalog including at least one video-on-demand element forming said at least one matrix row element; and

a second catalog including at least one video-on-demand element forming said at least one matrix column element, wherein each matrix cell represents a video-on-demand relationship between each video-on-demand element of the first catalog and each video-

on-demand element of the second catalog to enable systematic cooperation among video-on-demand elements according to a video-on-demand requirement.

Claim 26 (Original): An architecture as recited in claim 25, wherein at least one video-on-demand element is a catalog of video-on-demand sub-elements.

Claim 27 (Original): An architecture as recited in claim 25, wherein at least one video-on-demand element is a catalog of elements only peripherally related to video-on-demand.

Claim 28 (Original): An architecture as recited in claim 27, wherein the catalog of elements only peripherally related to video-on-demand includes an item selected from the group of items including customer habits, customer credit card and/or internet purchases, customer's friends, and customer product data.

Claim 29 (Currently Amended): A method of providing multilevel information about a plurality of video-on-demand related entities and resources, wherein said video-on-demand related entities and resources enable customers to choose interactively various programs stored in a video source and enable customers to view a selected program at any time, the method comprising the steps:

generating a display, on a computer display screen, of a tree having a plurality of nodes and branches interconnecting the nodes; and

embedding in the nodes information about a plurality of the video-on-demand related entities and resources; and

wherein the displayed branches represent relationships between the nodes and the information embedded in the nodes.

Claim 30 (Original): A method as recited in claim 29, wherein the plurality of video-on-demand related entities and resources include an entity and/or resource selected from: video-on-demand providers; video-on-demand composers/manufacturers; video-on-demand related sellers; video-on-demand advertisers; video manufacturers; video databases; video renters; and any combination of the above.

Claim 31 (Original): An article of manufacture comprising a computer usable medium having computer readable program code means embodied therein for causing provision of multilevel information about relationships between users and items of a plurality of video-on-demand related entities and resources, the computer readable program code means in said article of manufacture comprising computer readable program code means for causing a computer to effect the steps of claim 30.

Claim 32 (Original): An article of manufacture as recited in claim 31, wherein the video-on-demand resources are holdings of groups of products.

Claim 33 (Original): An article of manufacture as recited in claim 31, wherein the relationships include inventory information.

Claim 34 (Original): A method as recited in claim 1, further comprising implementing at least one process taken from a group of processes including: matrix and/or element expansion; logical set manipulation of catalog elements to form changed and/or new matrices, changed and/or new elements, and/or changed and/or new catalogs; catalog manipulation and/or combination; formation of one or more super catalogs and/or super-elements representing a catalog of catalogs; display of a plurality of trees and/or portions of trees in a variety of tree formats and shapes; and formation and/or manipulation of sub-catalogs and/or sub-elements from one or more catalogs, matrices and/or elements.